Successful Melody valve implantation in a stenotic conduit with large RVOT aneurysm

Abu Haweleh A., Fraisse A.
Queen Alia heart institute, Amman, Jordan

A 21 year old male with aortic valve stenosis, status post balloon aortic valvuloplasty at the age of 5 years, status post Ross operation with a 22 Contegra in the right ventricle outflow tract (RVOT) presented with left pulmonary artery stenosis and stenosis of the calcified Contegra with a huge RVOT aneurysm at the proximal part of the Contegra.

On the 30th of May 2016, he had successful LPA stenting using 36/12 mm intra stent ev3, Contegra and RVOT stenting using a 45 mm covered Numed CP stent to close the ostia of the aneurysm, with mild residual shunt. Before coronary artery testing was accomplished with aortic root angiogram while a 20mm diameter balloon was inflated in the RVOT conduit. This was followed by 22mm Melody valve implantation that completely abolished the shunt through the aneurysm. Immediately post procedure the pressure gradient across the RVOT dropped from 85 mmHg to 20 mmHg with a systolic RV pressure of 40 mmHg.

During follow up, he remained stable and last RVOT gradient by echo was 30 mmHg.

In summary, we present the successful treatment of a RVOT stenosis and aneurysm with covered stent and Melody valve implantation.